

ENGINEERING IN FOREIGN FIELDS



THE J.G.WHITE
COMPANIES
NEW YORK LONDON

ENGINEERING IN FOREIGN FIELDS



THE J. G. WHITE COMPANIES

43 EXCHANGE PLACE
NEW YORK

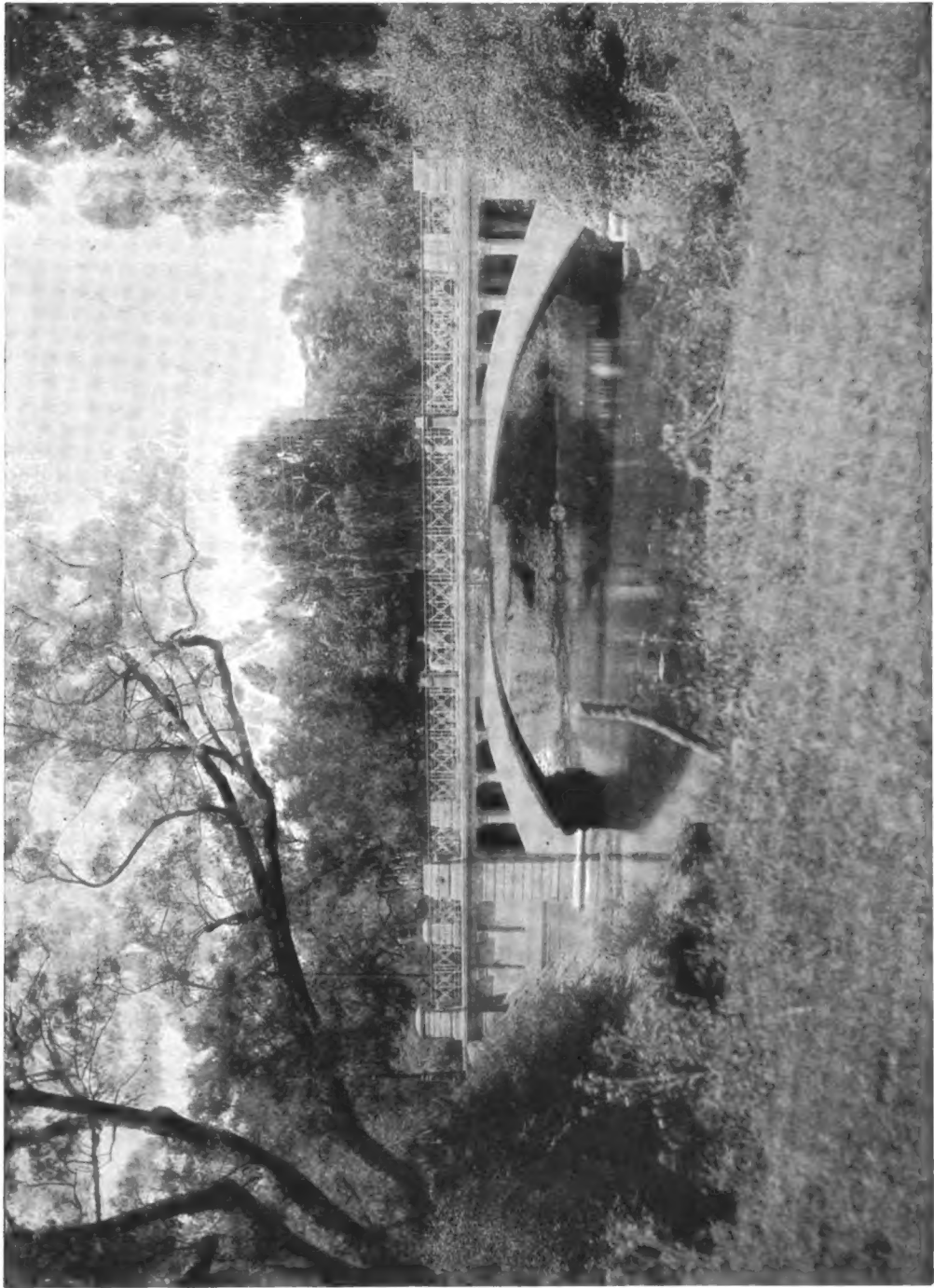
9 CLOAK LANE, CANNON STREET
LONDON, E. C.

BRANCH OFFICES AND CORRESPONDENTS

BUENOS AIRES, ARGENTINE
CAIBARIEN, CUBA
CARACAS, VENEZUELA
CHICAGO, ILLINOIS
GUAYAQUIL, ECUADOR
HAVANA, CUBA

KALGOORLIE, W. AUSTRALIA
MANAGUA, NICARAGUA
MANAOS, BRAZIL
MANILA, PHILIPPINE ISLANDS
MELBOURNE, AUSTRALIA
MERIDA, YUCATAN

MONTEVIDEO, URUGUAY
PARA, BRAZIL
PARANA, ARGENTINE
PERNAMBUCO, BRAZIL
SAN FRANCISCO, CALIFORNIA
SANTIAGO, CHILE



REINFORCED CONCRETE BRIDGE, MONTEVIDEO, URUGUAY

ENGINEERING IN FOREIGN FIELDS



THE events of the past two years have changed the outlook of America on the affairs of the world. Heretofore, the United States has secured abroad much of the capital for her own development, but now these debts are being rapidly repaid; the financial interests of the country are looking forward to the time when America will itself become an investor abroad, and are considering how best to work in order to broaden the scope of their activities and take a larger share in commercial world development.

Although the large manufacturing companies of the United States have for several years been developing their export business, and recently many foreign government credits have been arranged in New York and a number of banking and financial institutions have entered the foreign field, it has been generally true, heretofore, that the attention of companies in the United States has been confined to home development. It is believed that the J. G. White Companies are the only organizations of American origin engaged in engineering, construction and operation of public works and utilities, which have for many years been working in all parts of the world. They have been working in coöperation, and not in competition, with those interests in England and elsewhere in Europe which have done most in the financing of the relatively undeveloped countries. The results obtained lead them to feel confident that coöperation is the proper principle upon which to work. The experience and present position of the White Companies should therefore be of interest to bankers and investors considering opportunities abroad, for through the White engineers and constructors is provided an efficient and reliable channel, available to all inquirers, for investigation and development.

J. G. White & Co., of New York, have been well known as American engineers and contractors since 1890. In 1900, a separate company, J. G. White & Co., Ltd., was formed, with headquarters in London, to carry out work outside of North America and the overseas possessions of the United States. An organization located in the world's financial centre was advisable, in order to carry out the principle of coöperation with English interests as above described. For doing foreign work, specialists in the broad field of engineering, which in time was covered, had to be selected or trained, and information obtained from all parts of the world regarding construction costs, operating and financial conditions, and other details. Some of the operations were extremely difficult, but the knowledge and training gained through them, and the ability to apply it to other problems, gradually brought success to the London Company and secured for it a first place among the Engineering-Contracting companies of the world.

While the London Company was doing work in Europe, Australasia, India, and South America, the American organization, which in 1913 was divided into separate corporations, for engineering, for management, and for finance, undertook considerable work abroad in its own territory, notably in the Philippines, Central America, the West Indies and Mexico. While the American and English organizations are distinct, they work in close coöperation, and any special experience or knowledge which either may have is available for the other.

The Engineering Departments are prepared to design and supervise the building of electric and steam railways, electric lighting and power plants, gas plants, hydro-electric plants, water supply, drainage and sanitary works, and other public works of all descriptions, as well as sugar mills, cement mills, and other industrial plants and factories. They do purchasing and inspection for foreign and other clients on commission, and their staffs include specialists in all of the above branches, with experience gained in

many parts of the world. These specialists also make reports on the technical and financial conditions of projected works, and valuations and appraisals of existing properties. General information on projects or going concerns can frequently be obtained very quickly through one of the numerous foreign offices and agencies of the White Companies.

The Construction Departments will carry out the details of construction of any of these works. Their specialists are familiar with languages, labor conditions, and other circumstances influencing the economical execution of public works in South and Central America, Europe, Asia and Australia.

The Management or Operating Departments will supervise the operation of the works after completion, supplying experienced staff, inaugurating modern accounting and reporting systems, and exercising general supervision through its executives, who have had experience not only in relation to work required to be done, but also concerning legal and political conditions in foreign countries.

The Financial Departments are prepared to assist in the financing of new projects and the development of going concerns, when satisfied that they are sound and safe as investments.

In the following pages there is given a list, together with photographs, of some of the more important works carried out abroad by the White Companies, or supervised by them. These show the diversity of experience of these Companies.

The Companies are always glad to answer inquiries and to discuss business of the general character described above.



DOUBLE TRACK IN A PALM AVENUE, PARA, BRAZIL



MONTEVIDEO TRAMWAYS, URUGUAY



ELECTRIC RAILROAD CONSTRUCTION, SAN JUAN, PORTO RICO



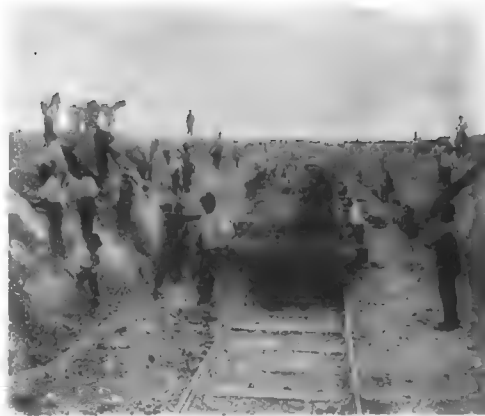
STEAM RAILROAD CONSTRUCTION, CUBA



STEAM RAILROAD, NICARAGUA



PROGRESS OF WORK IN A CUTTING



BALLASTING THE NEW TRACK



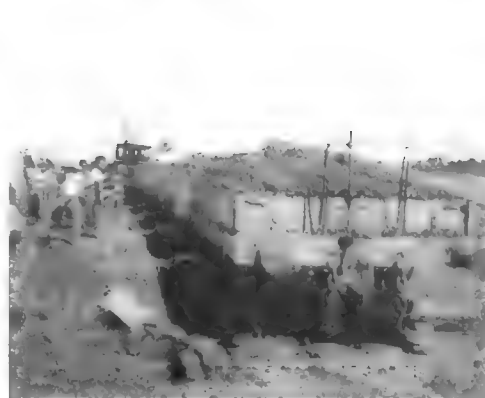
TRAMWAY TRACK REPLACED BY THE NEW
STRUCTURE



ROADBED AND TRACK COMPLETED



OVERHEAD LINE CONSTRUCTION, BUENOS
AIRES



EARTH TRAIN, BUENOS AIRES CENTRAL
RAILWAY

STEAM AND ELECTRIC RAILROAD CONSTRUCTION, ARGENTINE



ELECTRIC TRAMWAY, QUITO, ECUADOR



SPECIAL TRACK WORK ON THE LONDON COUNTY COUNCIL TRAMWAYS, LONDON, ENGLAND



HINDU WORKMEN, TRACK LAYING, BOMBAY, INDIA



AUCKLAND ELECTRIC TRAMWAYS, NEW ZEALAND



HEAVY FILL, STEAM RAILROAD, PHILIPPINE ISLANDS



TRACK LAYING, MANILA, PHILIPPINE ISLANDS



RAILROAD CONSTRUCTION, PORTO RICO



NATIVES MIXING CONCRETE, PHILIPPINE ISLANDS



TRAMWAY CAR SHEDS, MONTEVIDEO, URUGUAY



BRIDGE RECONSTRUCTION, BUENOS AIRES, ARGENTINE



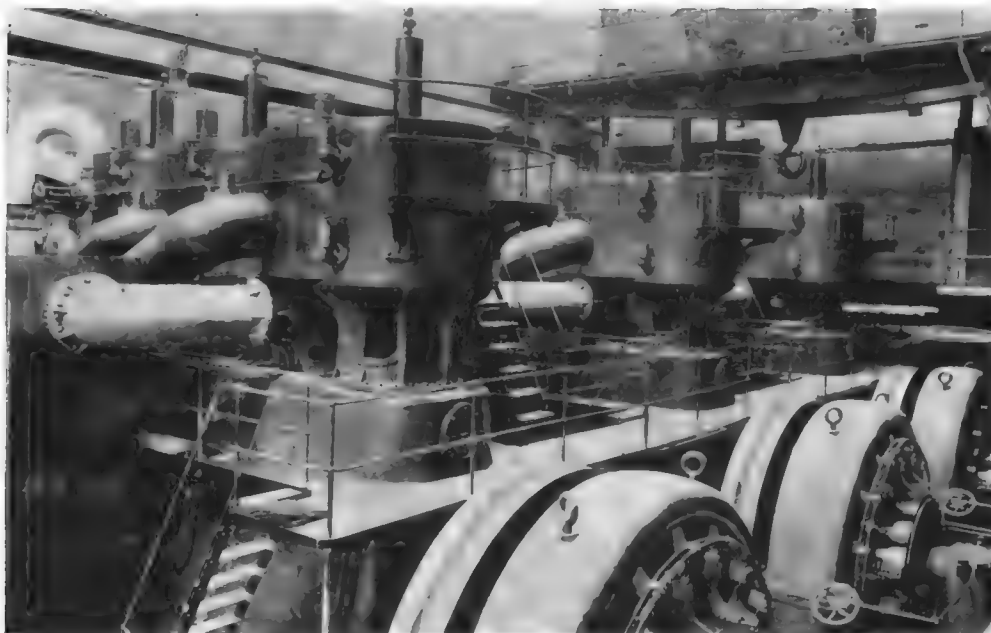
HEAVY GIRDER BRIDGE, AMSTERDAM-HAARLEM RAILWAY, HOLLAND



LIGHT AND POWER PLANT, KALGOORLIE, WESTERN AUSTRALIA



POWER PLANT, BELFAST, IRELAND



INTERIOR OF POWER PLANT, BELFAST, IRELAND



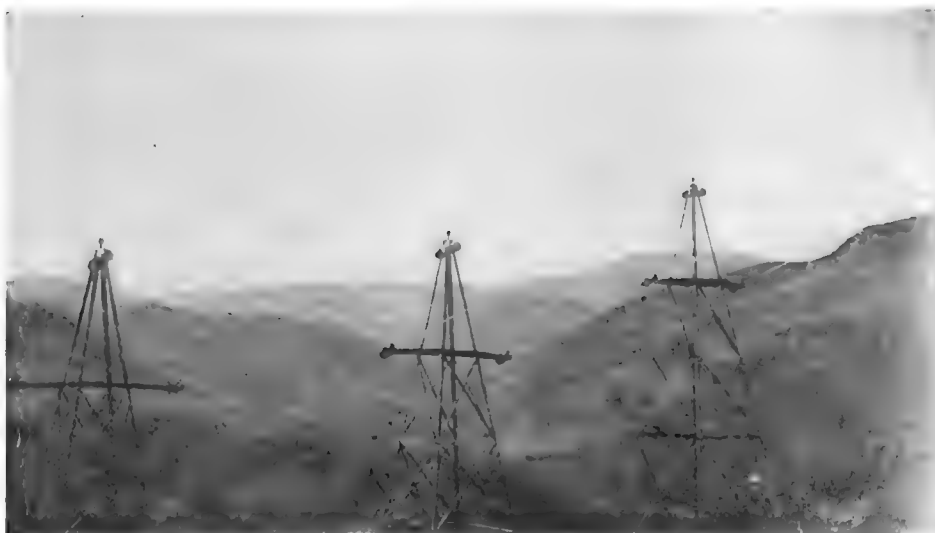
ELECTRIC POWER PLANT UNDER CONSTRUCTION, BOMBAY, INDIA



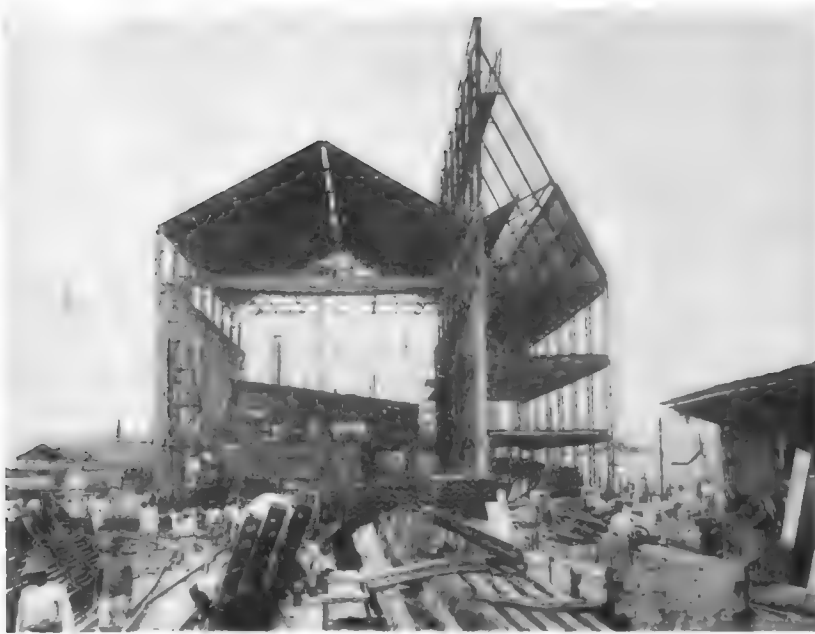
COMPLETED POWER PLANT, BOMBAY, INDIA



POWER HOUSE UNDER CONSTRUCTION, BUENOS AIRES, ARGENTINE



TRANSMISSION LINE, CARACAS, VENEZUELA



POWER PLANT CONSTRUCTION, PERNAMBUCO, BRAZIL



AMSTERDAM-HAARLEM RAILWAY PLANT, HOLLAND



HYDRO-ELECTRIC DEVELOPMENT, CANADA



CANAL, HYDRO-ELECTRIC DEVELOPMENT, CANADA



HYDRO-ELECTRIC DEVELOPMENT, PORTO RICO



HYDRAULIC DEVELOPMENT, LAKE ARIGUANABO, CUBA



POWER HOUSE AND TAIL RACE

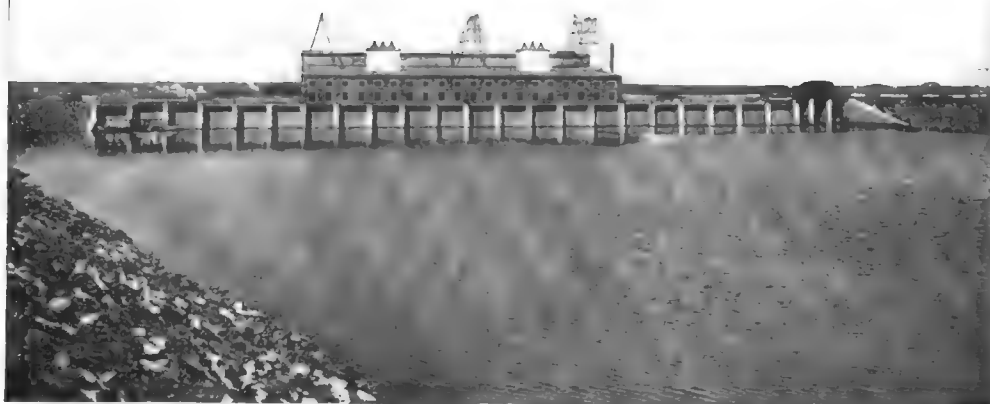


CANAL IN CUTTING

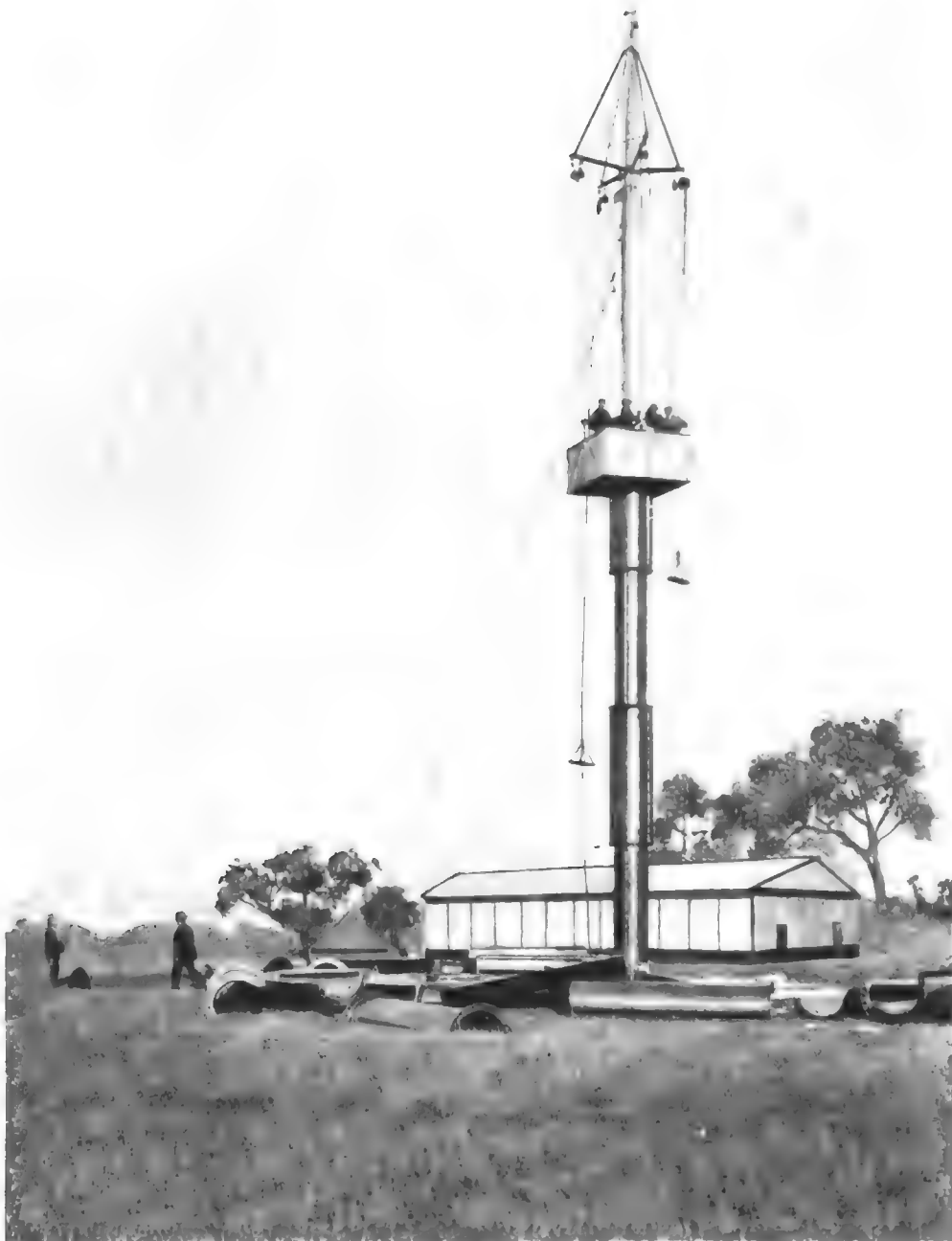
HYDRO-ELECTRIC INSTALLATION, CORDOBA LIGHT AND POWER
COMPANY, ARGENTINE



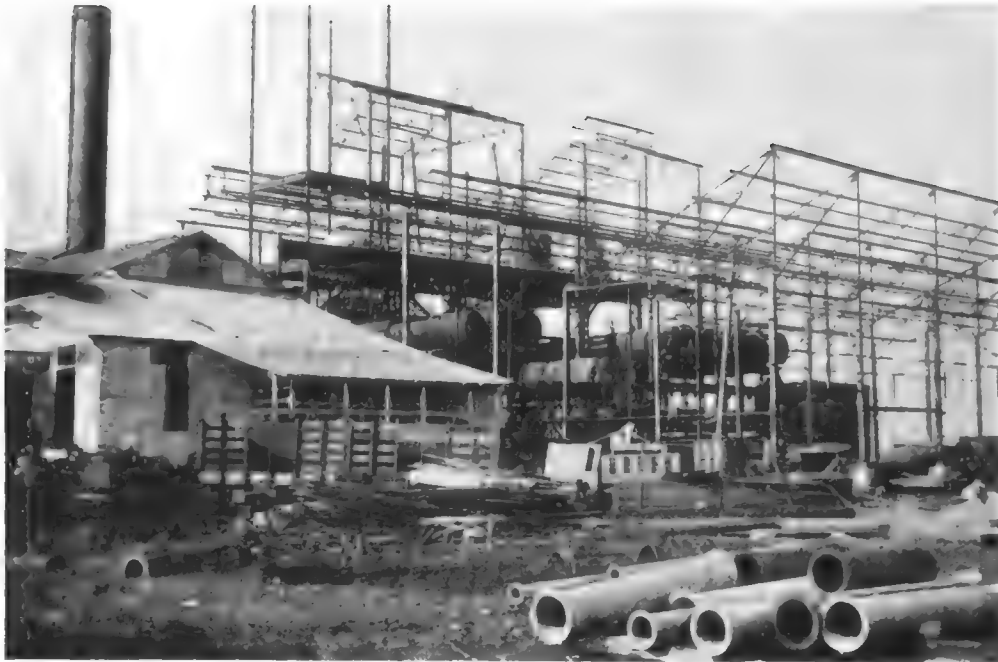
POWER HOUSE. HYDRO-ELECTRIC DEVELOPMENT, CANADA



COMPLETED POWER HOUSE, HYDRO-ELECTRIC DEVELOPMENT, CANADA



CONSTRUCTION, WIRELESS TELEGRAPH MASTS, HONOLULU, HAWAIIAN ISLANDS



SUGAR FACTORY UNDER CONSTRUCTION, MATANZAS, CUBA



COMPLETED SUGAR FACTORY, MATANZAS, CUBA



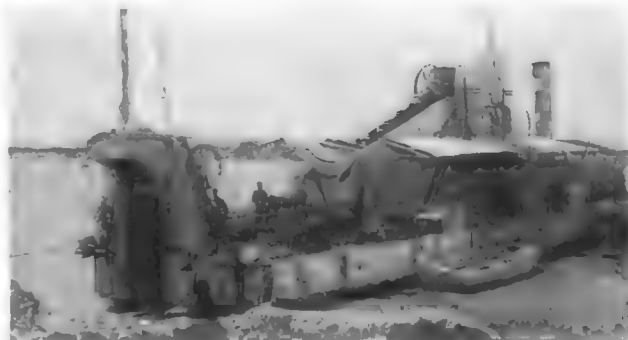
HARBOR WORKS, ILOILO, PHILIPPINE ISLANDS



WATERWORKS PIPELINE CON-
STRUCTION, CAIBARIEN, CUBA



WHARF CONSTRUCTION, GUAYAQUIL, ECUADOR



DREDGING, SANTA FÉ, ARGENTINE



RESERVOIR CONSTRUCTION, WATERWORKS, CAIBARIEN, CUBA



PIPELINE, CARACAS, VENEZUELA



MAIN SEWER, PARA, BRAZIL



RIVETING STEEL PIPE, CORDOBA,
ARGENTINE



WATER MAINS, GENOA, ITALY

PARTIAL LIST OF FOREIGN CONTRACTS COMPLETED OR
UNDER CONSTRUCTION BY

THE J. G. WHITE COMPANIES

Aberdeen Suburban Tramways, Scotland.	Lille Corporation Tramways, France.
Amsterdam-Haarlem Electric Railway, Holland.	Liverpool Cotton Exchange, England.
Auckland Electric Tramways, New Zealand.	London County Council Tramways, London, England.
Belfast Corporation Tramways, Ireland.	London United Tramways, London, England.
Bombay Electric Tramways & Lighting, India.	Mamo Hydro-Electric Installation, Caracas, Venezuela.
Bournemouth Corporation Electric Tramways, England.	Manila Electric Railroad & Light Company, Philippine Islands.
Buenos Aires Central Railway, Argentine.	Manaos Electric Tramways & Lighting, Brazil.
Buenos Aires Lacroze Electric Tramways, Argentine.	Matanzas - American Sugar Company, Cuba.
Caibarien-Remedios Water Works, Cuba.	Monterey Light & Power Company, Monterey, Mexico.
Canadian Light & Power Company, Canada.	Montevideo Electric Tramways, Uruguay.
Caracas Electric Tramways, Venezuela.	Northampton Tramways, Northampton, England.
Cardenas-American Sugar Company, Cuba.	North Melbourne Electric Tramways & Lighting, Australia.
Colchester Tramways, Colchester, England.	Para Electric Tramways, Brazil.
Comerio Falls Hydraulic Development, Porto Rico.	Parana Electric Lighting & Power, Argentine.
Cordoba Hydro-Electric Installation, Argentine.	Pernambuco Electric Tramways & Lighting, Brazil.
Derby Tramways, Derby, England.	Philippine Railways Company (steam), Philippine Islands.
Dumbarton Burgh & County Tramways, Scotland.	Porto Rico Electric Railways & Lighting, Porto Rico.
Ferrocarril del Pacifico de Nicaragua, Nicaragua.	Ritz Hotel, London, England.
Guayaquil Sanitation, Ecuador.	Santa Fé Electric Tramways & Lighting, Argentine.
Harbor Works, Cebu, Iloilo, Manila and Olongapo, Philippine Islands.	Waldorf Hotel, London, England.
Kalgoorlie Electric Power and Lighting Plant, Australia.	

